Exposure to marijuana during pregnancy alters neurobehavior in the early neonatal period.

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**Abstract**

OBJECTIVE: To assess the neurobehavior of full-term neonates of adolescent mothers exposed to marijuana during pregnancy. STUDY DESIGN: This prospective cross-sectional study included full-term infants within 24 to 72 hours of life born to adolescent mothers at a single center in Brazil. Data on sociodemographic and obstetrical and neonatal characteristics were collected. The mothers underwent the Composite International Diagnostic Interview, and the infants were assessed with the Neonatal Intensive Care Unit Network Neurobehavioral Scale (NNNS). Maternal hair and neonatal meconium were analyzed. Neonates exposed in utero to tobacco, alcohol, cocaine, and/or any other drugs except marijuana were excluded. RESULTS: Of 3685 infants born in the study hospital, 928 (25%) were born to adolescent mothers. Of these, 561 infants met the inclusion criteria and were studied. Marijuana exposure was detected in 26 infants (4.6%). Infants exposed (E) or not exposed (NE) to marijuana differed in the following NNNS variables: arousal (E, 4.05 1.19 vs NE, 3.68 0.70), regulation (E, 5.75 0.62 vs NE, 6.04 0.72), and excitability (E, 3.27 1.40 vs NE, 2.40 1.57). After controlling for confounding variables, the effect of marijuana exposure on these scores remained significant. CONCLUSIONS: Marijuana exposure during pregnancy alters the neurobehavioral performance of term newborn infants of adolescent mothers.